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THE Poultry and Egg SITUATION

BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

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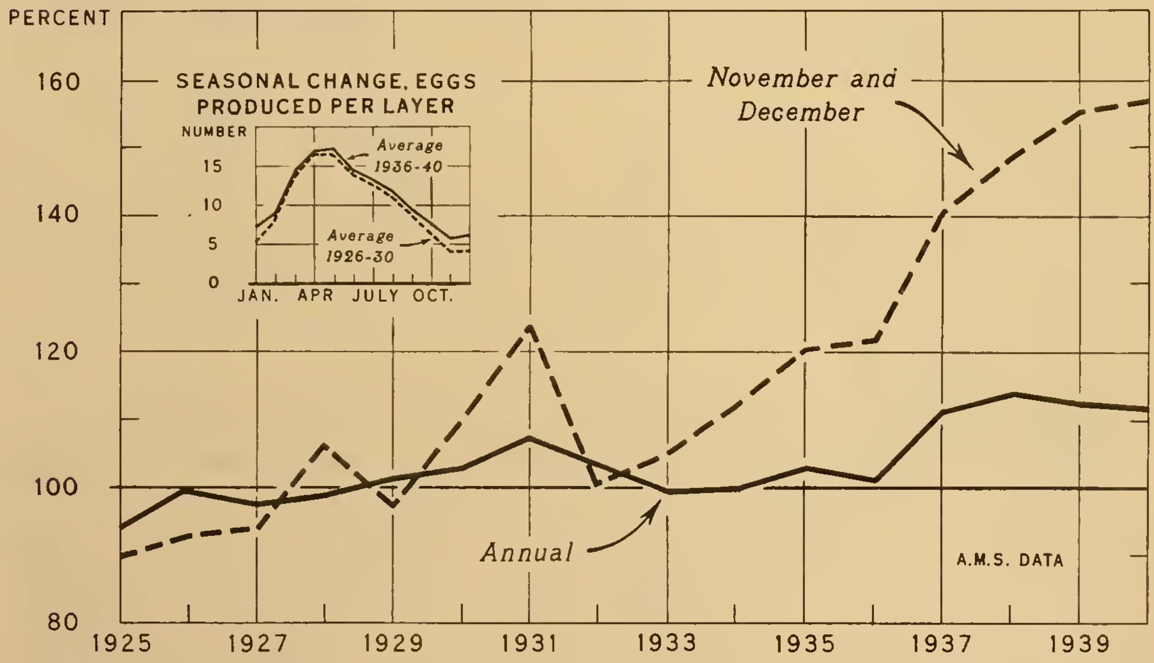
EGG PRODUCTION PER HEN IN THE UNITED STATES, 1925-40

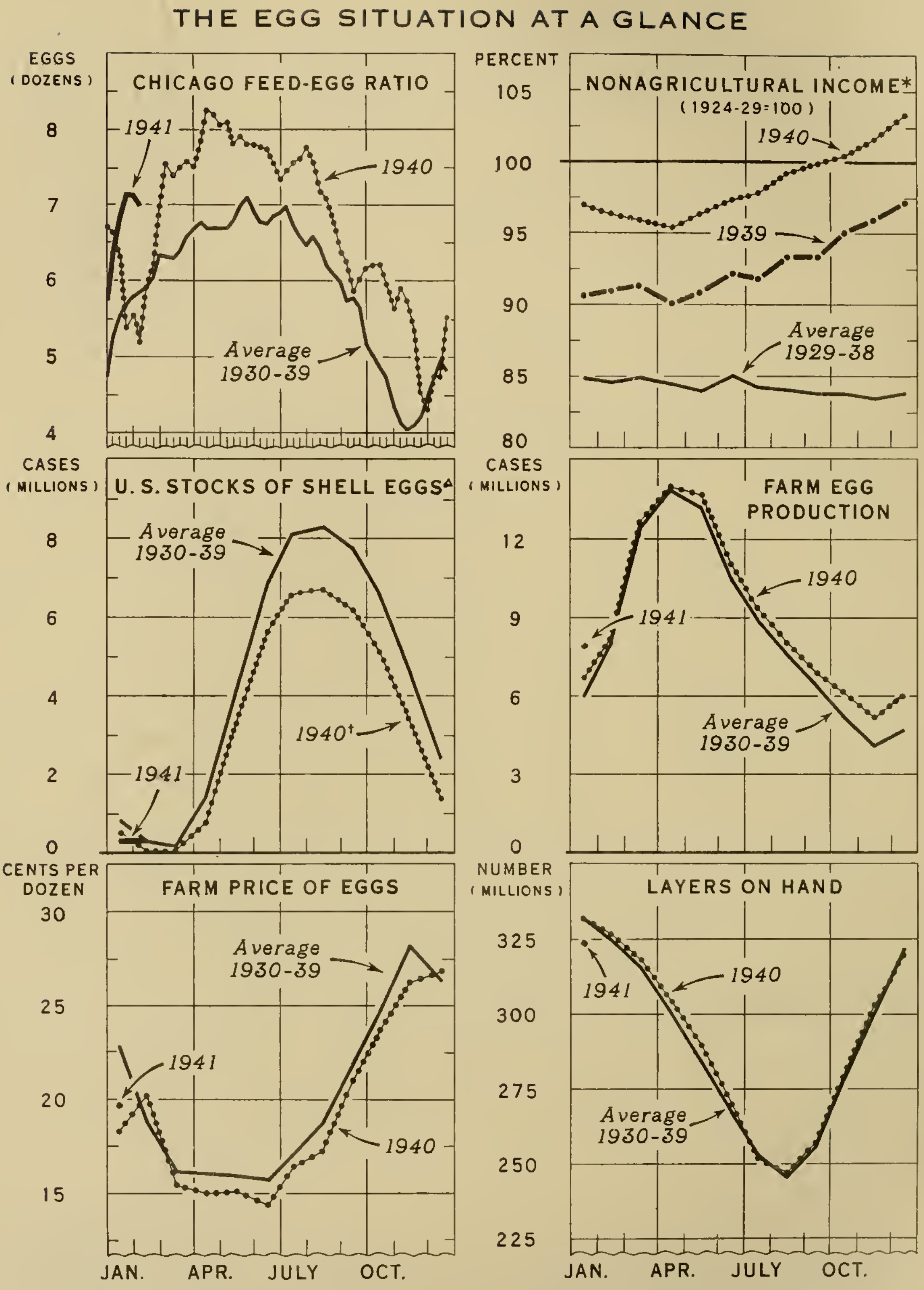
INDEX NUMBERS (1926-30=100)



U. S. DEPARTMENT OF AGRICULTURE

NEG. 38639 BUREAU OF AGRICULTURAL ECONOMICS

THE AVERAGE NUMBER OF EGGS PRODUCED PER HEN HAS INCREASED FOR ALL MONTHS DURING THE PAST 10 OR 15 YEARS (SEE COMPARISON OF 5-YEAR AVERAGES IN INSET). BUT THE INCREASE HAS BEEN MOST PRONOUNCED FOR THE FALL AND WINTER MONTHS, ESPECIALLY NOVEMBER AND DECEMBER. THE PHENOMENAL INCREASE--THE RESULT OF SELECTIVE BREEDING, BETTER FEEDING, AND IMPROVED MANAGEMENT--HAS CAUSED CHANGES IN THE SEASONAL PATTERN OF EGG PRICES AND HAS TENDED TO REDUCE THE QUANTITY OF SHELL EGGS STORED.



A. M. S. DATA, EXCEPT NONAGRICULTURAL INCOME ** INDEX NUMBERS, ADJUSTED FOR SEASONAL VARIATION*

△ FIRST OF THE MONTH *† EXCLUDING S. M. A. HOLDINGS, BEGINNING APRIL 1940*

U. S. DEPARTMENT OF AGRICULTURE NEG. 38961 BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 1

THE POULTRY AND EGG SITUATION

Summary

Egg production during the coming spring and summer may be slightly smaller than in the corresponding period of 1940 because of the fewer layers on farms than a year earlier. Egg production to date this year, however, has been much larger than a year earlier, mostly because of the mild weather compared to the unusually cold weather from mid-January to about mid-February in 1940. Both the number of eggs laid per hen and the total quantity of eggs produced in January were the largest on record for the month. Storage stocks of both shell and frozen eggs now are about at their seasonal lows and, with normal weather, net into-storage movements will begin in a few weeks. The storage demand is expected to be slightly stronger this season than last.

Most of the seasonal decline in egg prices, which usually occurs from November to March, took place this year from early December to about the middle of January. However, the average price received by farmers for eggs on January 15 was about a cent and a half (8 percent) higher than a year earlier. Wholesale egg prices changed little from mid-January to mid-February but recently declined slightly. The stronger consumer demand and the prospective slightly stronger storage demand this year than last, together with smaller supplies of eggs, are expected to cause egg prices to average higher in 1941 than in 1940.

Since January 1 receipts of live poultry at primary markets in the Middle West and receipts of dressed poultry at principal markets have averaged smaller than a year earlier. The net out-of-storage movement of frozen poultry has been larger than a year earlier, reflecting smaller farm marketings of live poultry and continued heavy consumption of poultry meat. Nevertheless, storage stocks of poultry on February 1 were the largest on record for that

date. Average prices received by farmers for chickens and turkeys in January were substantially higher than a year earlier and are expected to average higher this year than last, primarily because of the stronger consumer demand.

Although the feed-egg ratio now is considerably less favorable than a year earlier, it is expected to average more favorable during the months of heaviest egg production and chick buying. Because of this and the fact that in the past an upturn in the number of chickens raised usually has followed a decline, more chickens are expected to be raised this year than in 1940. Farmers' intentions as of February 1 indicate that 9 percent more baby chicks will be purchased this year than last.

— February 20, 1941

FEED-EGG RATIO

The cost of poultry ration, based on Chicago prices, has averaged a little lower to date in 1941 than in the corresponding period of 1940, but egg prices have been considerably lower than they were during the cold weather a year ago. As a result, the feed-egg ratio now is considerably less favorable than at this time last year. For the important egg-producing months this spring, however, the feed-egg ratio is expected to average more favorable than a year earlier, and the relative favorableness of the ratio during the latter period appears to have more influence on the size of hatch than the ratio in any other period. This consideration, together with the fact that an increase in hatch usually follows a decline, forms the basis for expecting a larger hatch this year than last.

Feed-egg ratio at Chicago

(Dozens of eggs required to buy 100 pounds of poultry ration)

Year	Week ending as of 1941											
	Jan.		Feb.				Mar.		Apr.	July	Oct.	Dec.
	18	25	1	8	15	22	1	29	26	26	25	27
	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.	Doz.
Average:												
1930-39	5.54	5.70	5.79	5.84	5.91	6.06	6.32	6.60	6.71	6.59	4.73	4.83
1939	6.15	6.65	6.52	6.07	6.07	6.21	6.38	6.35	6.65	5.76	5.13	6.62
1940	6.32	5.38	5.56	5.18	5.95	6.25	6.98	7.59	8.21	7.61	5.95	5.52
1941	6.86	7.16	7.13	7.00	7.11							

HATCHINGS

Production of winter broilers continued through January at a record or near-record level. The number of chicks produced by commercial hatcheries in January was 42 percent larger than the reduced output in January last year and is indicated to have been about the largest January output on record. The number of eggs set during the month and the number of chicks on order at the end of the month also were much larger than a year earlier.

The hatchery output of baby chicks soon will be used mostly for flock replacement rather than for commercial broilers. The number of chickens raised is expected to be larger this year than last. According to farmers' intentions reported as of February 1, about 9 percent more baby chicks will be purchased in 1941 than in 1940. Such early intentions, of course, may be changed somewhat as the season advances and as the feed and poultry-products price-relationships change. The Bureau of Agricultural Economics forecast of this year's hatch will be published in the March issue of The Poultry and Egg Situation.

EGG SITUATION

Egg production

The number of layers on farms is about 2 percent smaller now than a year ago, as indicated by the number of layers per flock on February 1, but the rate of lay per hen has been higher than in early 1940 when it was drastically restricted by the severe cold from mid-January to about mid-February. The rate of lay on January 1 was only 1 percent higher than a year earlier but on February 1 was 42 percent above that of the same date in 1940. The average number of eggs laid per hen in the month of January was 20 percent more than in January 1940. The increase over a year earlier in the February 1 rate of lay was general for the country as a whole but was most pronounced in the Central States, the area most affected by last year's cold. As a result of these high rates of lay, egg production to date this year has been larger than a year earlier. During the coming spring and summer, however, egg production may be smaller than a year earlier because of the smaller number of layers on farms.

The average number of eggs produced per hen per year has increased considerably in recent years, but the increase has been most pronounced in the fall and winter months. The increase in the November and December rate of production is shown in the chart on the cover page of this report. Although increases in the monthly output per layer have been most marked for November and December, important increases also have occurred for other "off season" months. Previous record high numbers of eggs produced per month per layer have been equalled or exceeded in every month since last September. The February 1 rate of lay in the United States was the highest on record for that date and was the highest on record for every region with the exception of the far Western States, where it was exceeded by the February 1939 rate of lay.

Egg storage

As a result of the unusually large market receipts of fresh eggs so far this year, net storage withdrawals have been smaller than usual. This is in direct contrast to the rapid reductions in holdings of a year earlier when storage stocks were nearly depleted as a result of the small production at that time. Storage stocks of privately-owned shell eggs on February 1, 1941 were about 5 times as large as the unusually small stocks of a year earlier while stocks of frozen eggs were 4 percent smaller than on February 1, 1940. However, these holdings are about the same as the 10-year average February 1 stocks. The Surplus Marketing Administration held only about 25,000 cases of eggs on February 1 compared with 301,000 cases on January 1, and before the middle of February had disposed of all eggs purchased during 1940.

A net out-of-storage movement has continued since February 1, and storage stocks of both shell and frozen eggs now are about at their seasonal lows. With continued favorable weather, net into-storage movements will begin in a few weeks.

Eggs: Storage stocks in the United States and storage movement at 26 markets

Year	United States stocks		Storage movement, week ending as of 1941					
			Jan.	Feb.				Mar.
	Jan. 1	Feb. 1	25	1	8	15	22	1
	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases	1,000 cases
Shell								
Average								
1930-39	836	278	-66	-53	-40	-37	-19	+17
1939	302	136	-21	-23	- 8	+ 3	+ 8	+29
1940	532	57	-94	-45	-14	- 4	+ 7	+41
1941	1/313	1/2/286	-56	-70	-23	- 9		
Frozen								
Average								
1930-39	1,975	1,674	---	---	---	---	---	---
1939	1,797	1,438	-20	-45	-34	-24	-11	+ 1
1940	2,065	1,607	-75	-70	-71	-74	-65	-98
1941	2,095	2/1,540	-70	-83	-68	-38		

1/ Excludes Surplus Marketing Administration holdings as follows: January 1, 301,000 cases; February 1, 25,000 cases.
2/ Preliminary.

These pronounced seasonal shifts in egg production have had important effects on all phases of the egg industry. Among the most important of these is a change in the seasonal variation for egg prices and a change in requirements for egg storage. The more even distribution of monthly egg production has reduced the quantities of storage eggs needed in the winter months and has also resulted in a definite flattening off of the annual seasonal "hump" in late fall egg prices.

Number of layers on farms, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.	Mil.
Average:												
1930-39	332	325	315	301	284	267	253	246	256	278	300	322
1938	307	301	292	278	262	248	236	234	245	269	293	314
1939	322	316	306	292	276	260	246	242	253	279	305	326
1940	332	327	318	304	289	270	252	247	257	279	303	320
1941	324											

Average number of eggs produced per layer, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Average												
1930-39	6.6	8.9	14.3	16.7	16.8	14.2	12.7	11.2	8.9	6.8	5.0	5.2
1938	7.9	9.9	15.4	17.5	17.3	14.9	13.6	11.8	9.4	7.5	5.9	6.4
1939	8.0	9.7	14.9	17.0	17.0	14.6	13.2	11.7	9.3	7.4	6.0	6.8
1940	7.2	9.0	14.4	16.5	17.0	14.8	13.4	11.8	9.7	7.9	6.2	6.8
1941	8.7											

Total farm production of eggs, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases	Mil. cases
Average												
1930-39	6.0	8.0	12.5	13.9	13.2	10.5	8.9	7.6	6.4	5.2	4.1	4.7
1938	6.7	8.3	12.5	13.5	12.6	10.3	8.9	7.6	6.4	5.6	4.8	5.5
1939	7.2	8.5	12.6	13.8	13.0	10.6	9.1	7.8	6.5	5.7	5.1	6.1
1940	6.7	8.2	12.7	14.0	13.7	11.1	9.4	8.1	7.0	6.1	5.2	6.0
1941	7.9											

1940-41 storage margin more favorable than a year earlier

Eggs are placed in storage mainly during the months of March-through-June, when egg production is the highest for the year. They are taken out of storage chiefly during the period September-through-January, when current production is considerably below current requirements for consumption. The total cost per dozen for storing eggs for this period of approximately 8 months, including deterioration of product as well as direct storing costs, is about 3 cents per dozen. Whether this cost has been met as a result of past seasons' operations can be roughly determined by comparing the average price of eggs when they were placed into storage with the average price upon removal. (However, these prices do not allow for any premiums or discounts which may have been paid or received). Such prices, weighted by net United States monthly storage movements, are compared in the accompanying table and show that the storing season now ending was much better from the viewpoint of storage operators than the 1939-40 season. The estimated storage margin of the past season apparently still was insufficient to cover the necessary costs. Nevertheless, storage demand in the coming into-storage season apparently will be better this year than last, when the storage margin of the preceding season was less than a tenth of a cent per dozen.

Estimated storage margin on shell eggs per dozen, average 1916-35, 1925-34, annual 1935-40

Year	Weighted average price of storage packed firsts at New York March-June	Weighted average price of refrigerator firsts at New York September-January	Storage margin
	Cents	Cents	Cents
Average			
1916-35	28.22	33.16	4.94
1925-34	24.08	27.69	3.61
1935	25.06	23.66	-1.40
1936	21.24	26.82	5.58
1937	22.62	20.54	-2.08
1938	20.37	23.95	3.58
1939	17.61	17.64	.03
1940	17.98	1/ 20.41	1/ 2.43

1/ Preliminary.

Egg prices

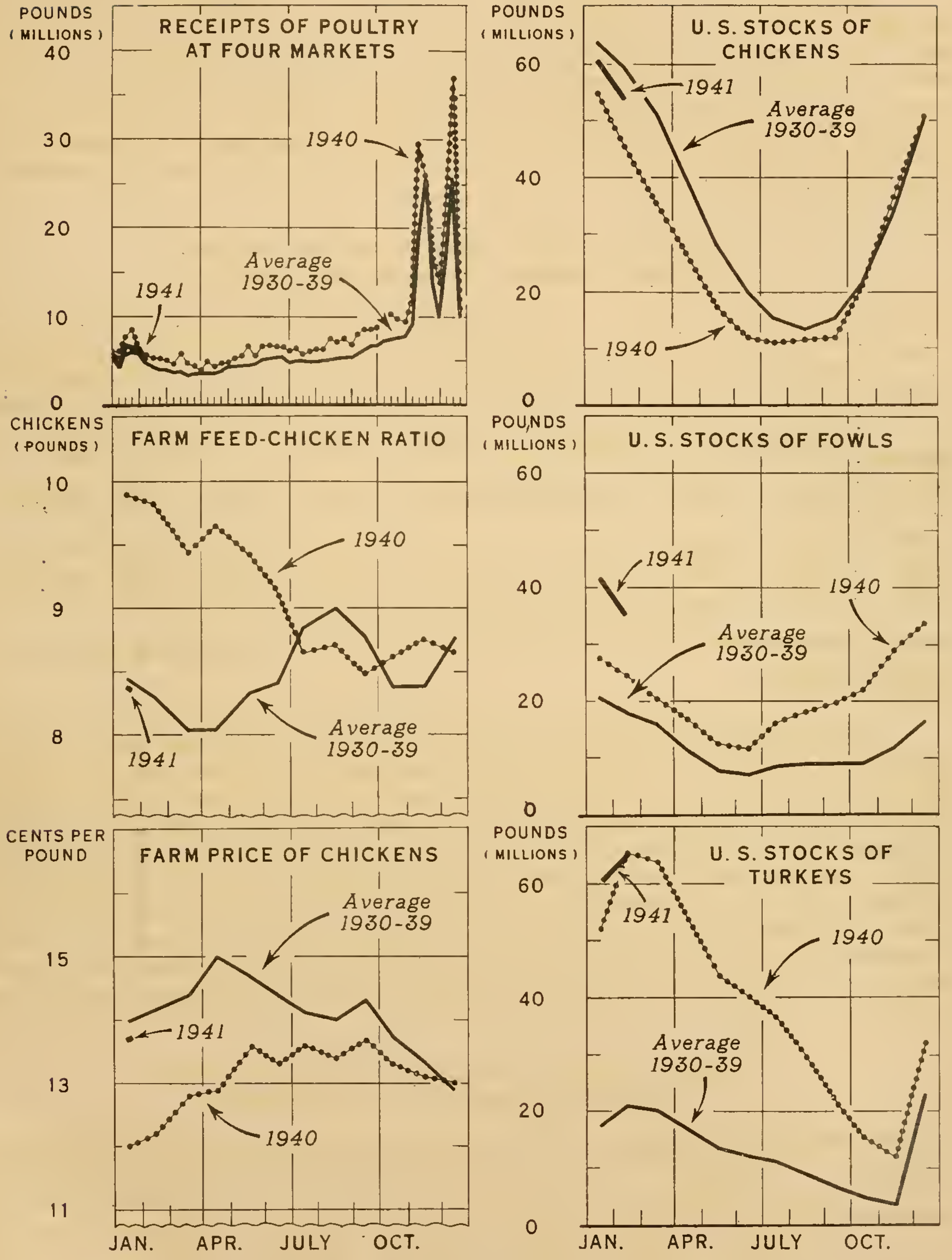
The average price received by farmers for eggs declined sharply from mid-December to mid-January after increasing contraseasonally from November 15 to December 15. The price in mid-January was 19.7 cents compared with 18.3 cents a year earlier and the 1930-39 average price of 22.8 cents. Although wholesale prices in the first part of February were only fractionally lower than in mid-January, egg prices in February averaged well below those in February 1940 when cold weather drastically restricted production. On January 31 the Surplus Marketing Administration began purchasing eggs in the New York and Chicago markets in an effort to support prices.

Because of the smaller supplies of eggs in prospect for this year and the stronger consumer demand this year than last, egg prices for 1941 are expected to average higher than in 1940. The slightly stronger storage demand expected for this year also will tend to support egg prices in the spring months.

Price per dozen received by farmers for eggs, United States

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
1930-39	22.8	18.8	16.1	16.0	15.9	15.7	17.0	18.7	21.9	24.7	28.2	26.3
1938	21.6	16.4	16.2	15.9	17.6	18.2	19.9	21.0	24.9	27.1	29.0	27.9
1939	18.8	16.7	16.0	15.5	15.2	14.9	16.5	17.5	20.6	22.9	25.8	20.5
1940	18.3	20.2	15.4	15.0	15.1	14.4	16.4	17.2	21.0	23.7	26.2	26.8
1941	19.7											

THE POULTRY SITUATION AT A GLANCE



A. M. S. DATA

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FIGURE 2

POULTRY SITUATION

Poultry marketings

Since January 1 receipts of live poultry at midwestern primary markets and receipts of dressed poultry at principal markets have averaged smaller than a year earlier. The higher egg prices expected for the next several months and the fewer chickens now on farms will tend to restrict farm marketings, but receipts at principal markets may be little different from those in early 1940 since there again will be heavy inter-market movements of storage poultry. Any larger hatch this year than last will tend to increase receipts in the last half of this year.

Receipts of dressed poultry at four markets
(New York, Chicago, Philadelphia, Boston)

Year	Week ending as of 1941									
	Jan.		Feb.				Mar.	Apr.	Dec.	
	18	25	1	8	15	22	1	26	20	27
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Average										
1930-39	5,610	6,009	5,764	4,739	4,421	4,024	4,023	5,793	25,458	9,947
1939	5,380	6,020	4,657	4,186	3,685	3,535	4,066	3,640	32,380	9,187
1940	7,678	8,628	6,111	5,334	5,163	5,130	4,884	4,623	36,909	10,766
1941	6,814	6,461	6,377	4,934	4,297					

Poultry storage

The smaller marketings of poultry this year than last are being reflected in a larger net out-of-storage movement of frozen poultry. During January all classes of storage poultry except turkeys showed reductions; and turkeys increased only about 5 million pounds compared with 13 million pounds in January 1940. For the first time in 2 years the first-of-the-month holdings of turkeys were smaller than a year earlier. With the exception of broilers and turkeys, stocks of all classes on February 1 were larger than a year earlier; stocks of fryers were 48 percent larger, stocks of fowl were 44 percent larger, and the other classes were slightly larger than a year earlier. Stocks of all poultry on February 1 were 15 percent larger than on February 1, 1940.

Poultry: Storage stocks in the United States
and storage movement at 26 markets

Year	United States stocks		Out-of-storage movement, week ending as of 1941					
			Jan.	Feb.				Mar.
	Jan. 1	Feb. 1	25	1	8	15	22	1
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
Average								
1930-39	128,737	123,248	1,264	1,462	2,077	2,715	3,034	3,469
1939	139,108	133,531	1,521	997	2,714	2,680	2,928	3,681
1940	167,643	166,962	1/256	578	2,954	4,455	5,742	6,030
1941	208,365	2/191,648	3,387	3,882	4,598	5,454		

1/ Into-storage movement. 2/ Preliminary.

Chicken prices

The average price received by farmers for chickens increased about seasonally from mid-December to mid-January, and in the latter month was only one-third of a cent below the 1930-39 average price for January. Wholesale prices of fowls have changed little since mid-January while prices of chickens have increased slightly.

Because of the larger consumer incomes for this year than last, the 15 to 20 percent smaller supplies of pork, and the prospective smaller supplies of poultry meat at least in the first half of the year, chicken prices are expected to average higher throughout 1941 than a year earlier. These factors also will support turkey prices.

Price per pound received by farmers for chickens,
United States

Year	Jan. 15	Feb. 15	Mar. 15	Apr. 15	May 15	June 15	July 15	Aug. 15	Sept. 15	Oct. 15	Nov. 15	Dec. 15
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Average:												
1930-39	14.0	14.2	14.4	15.0	14.7	14.4	14.1	14.0	14.3	13.7	13.3	12.9
1938	16.7	16.0	15.9	16.2	16.1	15.7	15.0	14.2	14.3	13.6	13.6	13.6
1939	14.0	14.2	14.3	14.4	13.9	13.4	15.7	13.0	13.6	12.7	12.4	11.7
1940	12.0	12.2	12.8	12.9	13.6	13.3	13.6	13.4	13.7	13.3	13.1	13.6
1941	13.7											

DOMESTIC DEMAND

Consumer purchasing power has been advancing steadily for 6 months in response to the continued expansion in industrial activity. Consumer demand for farm products responded rather sluggishly to these developments during the early months of this rise, but in recent months has shown definite evidence of increasing strength. During the next few months, changes in industrial activity and consumer incomes are expected to be relatively small, but the demand for farm products in general should continue to improve.

Index numbers of nonagricultural income

(1924-29 = 100, adjusted for seasonal variation)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Average:												
1929-38	84.9	84.6	84.9	84.5	84.0	85.1	84.3	84.1	83.7	83.7	83.4	83.8
1938	83.0	87.6	87.4	86.5	85.9	85.6	85.7	87.5	88.0	88.5	89.5	90.6
1939	90.6	90.9	91.3	90.0	90.8	92.1	91.8	93.3	93.3	95.0	95.9	97.1
1940	96.9	96.2	95.9	95.3	96.4	97.4	97.8	99.1	99.9	100.3	101.6	1/103.3

1/ Preliminary.

UNITED STATES FOREIGN TRADE IN POULTRY PRODUCTS IN 1940

Imports of eggs in the shell and of all egg products except dried yolks were smaller in 1940 than in 1939. Imports of dried yolks, however, were about four times as large as in the previous year, and more than offset the decline in imports of the other products. Total imports of shell-egg-equivalent were larger in 1940 than in 1939.

Exports of eggs in 1940 also were larger than in the previous year, however, and in terms of actual quantities of shell-egg equivalent about offset the larger imports. Furthermore, the relative importance of imports continued small during 1940 since they again amounted to less than one-fourth of 1 percent of our annual domestic production.

The limited domestic market for liquid and dried albumen is an important reason for the large imports of dried yolks. Since domestic requirements for liquid and dried yolks usually has exceeded the domestic requirements for liquid and dried albumen it has been necessary either to overproduce albumen or to import yolks.

Imports of dressed and prepared poultry during 1940 were smaller than in 1939 but imports of live poultry were larger. Exports of both live and dressed poultry during 1940 were smaller than in the previous year. However, these changes are of little significance, since both exports and imports of poultry are of even less relative importance than those of eggs.

Exports of eggs and poultry, United States,
1939 and 1940

Commodity	Unit	1939	1940
Eggs in shell	Doz.	2,696,826	4,570,806
Eggs and yolks, frozen dried, or canned	Lb.	Not available	139,082
Live poultry	Lb.	164,206	107,879
Dressed poultry	Lb.	2,583,495	1,680,176

Imports of eggs and poultry, United States,
1939 and 1940

Commodity	Unit	1939	1940
Eggs in shell	Doz.	328,523	227,411
Whole eggs, dried	Lb.	61,500	40,950
Whole eggs, frozen	Lb.	420	167
Yolks, dried	Lb.	682,805	2,457,536
Yolks, frozen	Lb.	25,330	420
Egg albumen, dried	Lb.	500,479	332,389
Egg albumen, frozen	Lb.	0	0
Live poultry	Lb.	826,957	1,438,310
Baby chicks	No.	806	2,902
Dressed poultry	Lb.	195,280	382,575
Poultry, prepared	Lb.	733,795	327,200

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